DOCUMENT RESUME

ED 274 010 CS 505 371

AUTHOR Applbaum, Ronald L.
TITLE Communication Apprehension and Hispanics: An Exploration of Communication Apprehension among Mexican Americans.
PUB DATE May 86
NOTE 30p.; Paper presented at the Annual Meeting of the International Communication Association (36th, Chicago, IL, May 22-26, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Bilingualism; *Communication Apprehension; *Communication Research; Comparative Analysis; Females; Higher Education; High Schools; Hispanic Americans; Language Attitudes; Language Proficiency; Males; *Mexican Americans; Sex Differences

ABSTRACT

A study compared normative communication apprehension (CA) data on Mexican American high school and college students with CA data from other Hispanics speaking English in order to determine the extent to which the subjects' self-perceived competence in a language was related to CA in that language. Subjects were 388 Mexican American and 41 Anglo students enrolled at Pan American University (Texas), and 252 Mexican American and 31 Anglo high school juniors and seniors from a large Texas public high school. Subjects completed two versions of the Personal Report of Communication Apprehension (PRCA-24)--the first dealing with apprehension associated with speaking English, the second associated with speaking Spanish. Results indicated that (1) CA in the dominant language was lower than in the second language across communication contexts, (2) CA levels increased as the measures moved from more informal, personal contexts to the more formal, less personal contexts; (3) women experienced more CA than men across situations on both languages; (4) subjects had higher CA levels than those of other previously tested Hispanic groups; (5) CA patterns were consistent with those of previously tested bilingual samples; (6) a significant relationship exists between CA and language proficiency in both English and Spanish; and (7) CA levels for the Mexican American students were higher than those of Anglo students. (Tables of data and 72 references are included.) (Author/HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED274010

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Communication Apprehension and Hispanics: An Exploration of Communication Apprehension among Mexican Americans

Ronald L. Applbaum

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Ronald L. Applbaum

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS505371

BEST COPY AVAILABLE

ABSTRACT

This study was designed to measure the Communication Apprehension (CA) of Mexican American college students and compare that data with the results of previous research within the United States and cross cultural research. The results indicated that: (1) CA in the dominant language was lower than in the second language across communication contexts; (2) CA levels increased as the measures moved from more informal, personal contexts to the more formal, less personal contexts; (3) women experienced more CA than men across situations on both languages; (4) subjects indicated higher CA levels, than other previously tested Hispanic groups; (5) CA patterns were consistent with those of previously tested bilingual samples; (6) a significant relationship existed between CA and language proficiency in both English and Spanish; and (7) CA levels for the Mexican American students were higher than those of Anglo students.

COMMUNICATION APPREHENSION AND HISPANICS:

AN EXPLORATION OF COMMUNICATION APPREHENSION AMONG MEXICAN AMERICANS

The U.S. Bureau of the Census classifies Hispanics as persons of Spanish origin or descent who designate themselves as Mexican American, Chicano, Puerto Rican, Cuban and Other/Spanish/Hispanic. Although tied together by a common cultural background, language and religion, these groups present distinct social-cultural and economic profiles (Ford Foundation, 1984, p.6). Sixty percent of the 14.6 million Hispanics in the United States, excluding Puerto Rico, are of Mexican origin (U.S. Bureau of the Census, 1981; Passel and Warren, 1983), with the majority of these individuals residing in the Southwestern United States.

Hispanic enrollment and graduation from postsecondary education institutions is significantly lower than that of the general population and other major ethnic and racial groups in the United States (Commission on Higher Education of Minorities, 1982). It is believed that one of the most significant factors impacting upon the educational attainment of Hispanics is their English language background and proficiency (Fligstein and Fernandez, 1982; Duran, 1983). Language is a vital component of personal identity, cultural continuity and group cohesion, and most Mexican Americans maintain strong patterns of use of both Spanish and English languages (Macias, 1979).

Students using these two languages may either experience Communication Apprehension, or, alternatively, may use their bilingualism to avoid situations in which they feel apprehensive (Krashen, 1981). In the case of bilinguals, apprehensiveness in the primary language will usually lead to apprehension in the second language (Fayer, McCrosky and Richmond, 1984; McCrosky, Fayer and Richmond, 1983).

It is also generally recognized that possession and use of English language skills is a pre-requisite to full and effective participation in public school education in the United States (Astin, 1982). Erickson and Schutz (1982) noted a lack of research on young Hispanics' communicative competence in high school. It has been suggested that communicative competence research may point to factors other than surface proficiency in the English language as having the dominant effect on success in classroom communication (Duran, 983). While only limited research has explored the possible relationship between oral communication and educational attainment among Hispanics, it is known that the quantitative character of communicative participation is distinctly less for Mexican American students and that factors other than language proficiency in English among Mexican American students might be responsible for the quantity of communication in classrooms (Laosa, 1977); Ramirez, 1981; U. S. Commission on Civil Rights, 1973).

Communication Apprehension (CA) is an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons. CA is said to affect the behavior of more students than all learning disabilities combined (Hurt, Scott, McCrosky, 1978). It has been estimated that over twenty percent of all students experience high levels of CA (McCrosky, 1970, 1977a, 1982a). CA is highly associated with ineffective oral communication and has a negative effect on academic success. At the college level, the apprehensive student typically has a lower over-all grade point average and lower achievement scores on standardized tests than less apprehensive students (McCrosky and Andersen, 1976). Hurt and Preiss (1978) suggest that as the students' CA increases, their attitudes toward school become more negative motivation to learn decreases and final grades are detrimentally affected. CA can act as a general learning inhibitor for the

bilingual and/or Mexican American student.

Communication Apprehension and The Classroom

In the United States' educational system, effective oral communication is highly valued and rewarded. Hurt, Preiss and Davis (1976) identify the impact of oral communication on the learning environment:

> There is little doubt that the North American educational system places great reward on verbal behavior in the classroom. Pedagogical devices such as testing, group discussions, story-telling, experimental learning, and the like, all demand frequent verbal output on the part of students. Out-of-class activities such as counseling sessions, and even recess, also demand verbal interaction.

Carroll, (1964) noted that most learning occurring in the school environment is verbal learning; not only the acquisition of new words for new concepts, but also the ability to verbally express the nature of those concepts.

CA is highly associated with ineffective oral communication and, thus, it can have a negative impact on academic success. At the elementary level, teachers have been found to evaluate students' academic potential differently on the basis of communication apprehension (McCrosky and Daly, 1976). Teachers often expect the highly apprehensive student to do less well in most areas of academic achievement, have less satisfactory peer relationships and a lower probability of academic success than less apprehensive students. The apprehensive student develops a dislike for school early and drops out readily (Klopf, 1978; McCrosky, 1976). No significant relationships have been observed between CA measures and intelligence measures (McCrosky, 1977). Hurt an Preiss (1978) suggest that as the students' CA increases, their attitudes

toward school become more negative, motivation to learn decreases and final grades are detrimentally affected.

For the high CA, the normal educational situation would be perceived as threatening. Students are required to participate in class meetings, group discussions, oral reports to classmates and conferences with counselors and teachers. Students learn to feel anxious in situations in which they have little control (McCrosky and Richmond, 1980). Communication in these contexts may result in lowered affective thresholds leading to heightened anxiety, withdrawal, less persistence in a second language and negative academic consequences (Krashen, 1981).

The school environment is a factor in the development of communication apprehension. And, CA may influence the development of the student's personality and social development within the school environment. Daly and Friedrich (1981) state that "school can and does have an effect on apprehension. The responses and environmental norms established by the school serve to increase or reduce anxiety (p.252)." In turn, the student's behavior affects the way in which those in the school environment, for example, a teacher, reacts to the student. The school environment can create, maintain or decrease the level of communication apprehension. CA becomes a stable individual characteristic by the time the student has reached high school.

Bilingualism

Bilingualism, that is, the use of two languages, specifically in the education setting, is a serious educational concern throughout the United States, and particularly among members of the Hispanic community. Krashen (1981) suggests that a lowered affective filter is essential for developing competence in a second language. When a student uses two languages, he/she

may avoid situations in which they must function in a language with which they feel apprehensive. In a study of non-native English speakers, Allen, O'Mara and Andriate (1984a) found that individuals who were apprehensive in English would avoid situations in which they would be called upon to function in English.

Apprehensiveness in the primary language is usually related to apprehension in the second language (Fayer, McCrosky and Richmond, 1984; McCrosky, Fayer and Richmond, 1983). Thus, students who are highly apprehensive when speaking in their native language may have difficulty learning a second language. The "language" problem of the student may not reflect either the student's lack of language competence or skill, but their CA. Furthermore, CA would not be significantly affected by more sophisticated language or skill training, since CA is an affective response of the individual.

Phillips and Butt (1966) found that a disproportionately high percentage of students identified as experiencing high levels of CA were from first and second generation ethnic families. They suggest two possible causes for the high CA levels: (1) students may have more difficulty acquiring English language skills, because of the mixture of languages used at home and (2) the students' parents may have lower English language and English oral communication skills and, consequently, be more hesitant to provide reinforcement or mixed reinforcement patterns to the child who is learning to communicate in a society which is linguistically foreign to the parent.

Purpose of the Study.

Previous cross cultural research on Communication Apprehension has indicated significant differences among nationalities and cultural groups (Klopf and Cambra, 1979; Allen, O'Mara and Andriate, 1984 and 1984a; Allen, O'Mara

and Judd, 1985; Fayer, McCrosky and Richmond, 1984; McCrosky, Fayer and Richmond, 1983). Prior to this study, no data had been reported on Communication Apprehension among Mexican Americans. The present research was undertaken to generate normative data on Mexican Americans at the high school and college level. This data was to be compared with previous research data drawn from high school and college level students primarily from the United States, Puerto Rico and non-native bilingual populations. Based on a comparison of previously reported data, the following research questions were examined:

1. Are CA norms for Mexican American high school and college students speaking English similar to those of other Hispanics speaking English?
2. Are CA norms for Mexican American college students speaking either English or Spanish similar to those of other Hispanics speaking English or Spanish?
3. Are the CA scores of Mexican American high school students speaking Spanish different than their CA scores when speaking English?

The study sought to determine the extent the subjects' self-perceived competence in a language was related to Communication Apprehension in that language. Two research questions were examined:

4. Is self-perceived competence in English related to CA in English?
5. Is self-perceived competence in Spanish related to CA in Spanish?

The study explored the relationship between the CA levels of subjects across the two languages. The research question explored was:

6. Is CA in English related to CA in Spanish?

It has been suggested that within the Mexican American culture attitudinal differences exist between genders (Cuellar, Harris and Jasso, 1980).

The following questions were examined:

7. Are there differences between CA levels among Mexican Americans by gender speaking English in various contexts?
8. Are there differences between CA levels among Mexican Americans by gender speaking Spanish in various contexts?

Two separate studies were conducted during the Spring of 1985. Study No. 1 involved the testing of college students at Pan American University. Study No. 2 involved the testing of high school students in South Texas.

STUDY NO. 1 - COLLEGE LEVEL PROCEDURES

Measures.

The Communication Apprehension (CA) of subjects was measured by the Personal Report of Communication Apprehension (PRCA-24) instrument which focuses on apprehension about oral communication (McCrosky, 1970, 1982). McCrosky (1978) found that the PRCA is (1) capable of predicting behavior that is consistent with the CA construct, (2) correlates with personality variables consistent with the CA construct, and (3) provides a measure of a stable characteristic of the individual that can be altered through intervention.

Two versions of the twenty-four item PRCA developed by McCrosky (1984) were administered to all subjects. The first version was associated with speaking in English. The second version was targeted to assess feelings of apprehension associated with speaking in Spanish. Both versions of the PRCA-24 were administered in English. The PRCA-24 instrument has high reliability and predictive validity (McCrosky and Beatty, 1984); it has demonstrated alpha reliability coefficients ranging between .82 and .86 in Spanish and .83 and .90 in English using both versions of the measure (Allen and Andriate, 1984; Allen, O'Mara and Andriate, 1984a). Data from over 25,000

previously tested subjects indicates a mean of 65.6 and a standard deviation of 15.3 on the PRCA. Language proficiency measures of subjects in both Spanish and English were attained by asking subjects to rate their proficiency in each language on a scale from 1 to 5. This measurement method has been used in recent studies of CA and language proficiency and, thus, provides a method for comparing results across studies (Fayer, McCrosky, and Richmond, 1984; McCrosky, Fayer and Richmond, 1983). Data was also collected subject relative to ethnicity, ethnic generation and gender.

Subjects.

The study sample was composed of 429 undergraduate students enrolled in basic psychology and basic stuoies courses at Pan American University, Edinburg, Texas. While eighty percent of all students at this institution are of Hispanic origin, ninety percent (388) of the subjects were of Mexican American ancestry. Of all participants, 273 (63.6%) were female and 156 (36.4%) were male. Among the Mexican American students, 254 (65.5%) were female and 134 (34.5%) were male. Among the Anglo students tested, there were 22 males and 19 females. While 42.9 percent (184) of the subjects were first or second generation, 24 percent (103) were fifth generation in the United States. While the native language was either English or Spanish, the dominant societal language for all subjects was English. Only 31 subjects did not speak Spanish. Participation in the study was voluntary, although the psychology students did receive course credit for participating in the research project. All subjects were debriefed immediately following administration of the PRCA-24 measures.

STUDY NO. 2 - HIGH SCHOOL LEVEL

Measures

The Communication Apprehension (CA) of subjects was measured by the Personal Report of Communication Apprehension (PRCA-10) instrument which focuses on apprehension about oral communication (McCrosky, 1970, 1982).

Two versions of the 10 item PRCA were administered to all subjects. The first version was associated with speaking in English. The second version was targeted to assess feelings of apprehension associated with speaking in Spanish. Both versions of the PRCA-10 were administered in English.

Correlations between the PRCA-10 (short form) and PRCA-24 (long form) have ranged between .88 and .92. Internal reliability estimates for the PRCA-10 have ranged between .87 and .90 for student samples. Test-retest reliability has been estimated at .74 over a five-week time period. Data from over 9,500 previously tested subjects indicates a mean of 30 with a standard deviation of 7. Scores above 34 are considered a "high" and those below 21 are considered "low" and are analogous to the CA category ranges on the long form. The short form of the PRCA was used in this study, because time constraints did not permit employing the longer form and the researchers sought to reduce potential subject fatigue (Hurt and Preiss, 1978; McCrosky, 1978).

Language proficiency measures of subjects in both Spanish and English were attained by asking subjects to rate their proficiency in each language on a scale from 1 to 5 (5 = excellent and 1 = poor).

Subjects

The study sample was composed of 284 secondary level students drawn from a large South Texas public high school which incorporates grades 9 through 12.

The students were drawn from 10th and 11th grade regular English classes. Eighty-eight percent (252) of the subjects were of Mexican ancestry with 70.2 percent being first or second generation. In contrast, of the 31 Anglos sampled in these classes, ninety percent of these students were fourth or fifth generation U.S. citizens. Among the Mexican American students, 136 (53.9%) were female and 116 (46.1% were male. Among the Anglo students, 13 female and 18 male. While the native language for all subjects was either English or Spanish, the dominant societal language was English. Only 37 subjects did not speak Spanish. Participation in the study was voluntary, and students received no course credit or reward for their participation in the research project. Subjects were debriefed following administration of the PRCA-10 measures. All subjects were tested within the same school week in the Spring of 1985 in their regular English classes.

RESULTS

Study No. 1

Table 1 shows the overall CA and context CA subscore means on the PRCA-24 for male and female subjects speaking English and Spanish. The data presented in Table 1 shows an increase in the means of context subscores as we move from dyad to group to meeting to public contexts. The data indicates that the mean CA scores in Spanish are higher than mean English CA scores on both the overall CA measures and subscore measures. Females also show higher mean CA scores than males on overall CA and subscore measures across both languages.

Table 2 presents the percentage of subjects with high CA by sex and language on all CA measures. The data analysis of Table 2 indicates that (1) females have a greater percentage of high CAs than males on overall CA; (2) females have a greater percentage of high CAs than males when speaking either

English or Spanish; (3) females have a higher percentage of high CAs than males in all four communication contexts. Table 2 also shows that as the number of participants in the communicative context increases, the percentage of high CAs in all but two group contexts increased.

Table 3 shows an analysis of the level of CA by sex and communicative context. One-way analysis of variance procedures were used to examine differences between males and females on the overall CA and subscore context measures. Female CA measures were significantly different from male CA measures on overall CA, meeting CA and public CA measures when speaking Spanish.

Table 4 shows the relationship between the subjects' self-reported language proficiency and their overall CA score and context subscores. The subjects' proficiency measures were significantly correlated with all their CA measures in English and Spanish. Table 5 reports the obtained correlations in English and Spanish for the overall PRCA measure and for each of the subscores. All obtained correlations are positive and significant.

The subjects' mean language proficiency ratings were 3.277 for English and 2.527 for Spanish. Only 20 subjects rated their proficiency in English as below average or poor, whereas 158 subjects rated their Spanish language proficiency as below average or poor. Fifty-two (52) subjects indicated a preference for speaking only English and 33 showed a preference for speaking only Spanish. A majority (220) of the subjects classified themselves as bilingual speakers. The correlation between the subjects' ratings of language proficiency in English and Spanish was non-significant (-.0792). However, the correlation between the subjects' overall CA measures in English and Spanish was significant at +.4730 (p.001).

Study No. 2

Table 6 shows the CAs scores on the PRCA-10 for Mexican American male and female subjects speaking English and Spanish. The data indicates that the mean CA scores for both male and female subjects when speaking either English or Spanish are higher than those found in other studies of comparable age groups in individuals tested on the PRCA-10. The Spanish CAs scores were higher than the English CA scores for both sexes. The Anglo subjects in this study showed CA scores similar to those found in previous studies using this CA measure. Anglo male and female CA scores in English were 30.77 and 32.22, respectively, and in Spanish, 35.6 and 36.0.

One-way analysis of variance procedures were used to examine differences in CA levels among Mexican American subjects by gender speaking either English or Spanish. The data indicates no significant differences between male and female subjects.

Table 7 presents the percentage of subjects with high CA by sex and language. The data analyses of Table 2 indicates that Mexican American males and females have a high percentage of high CAs when speaking either in English or Spanish. The Anglo subjects scores also indicated a high percentage of high CA scores only when speaking Spanish.

The subjects' proficiency measures in a particular language, English or Spanish, were significantly correlated with their CA measures when speaking that specific language. All correlations are positive and significant at the .001 level. Mexican American subjects scores showed a .32 correlation between proficiency in Spanish and CA in Spanish and a .33 correlation between proficiency in English and CA in English.

The subjects' mean language proficiency ratings were 3.57 for English and 2.89 in Spanish. Only 14 subjects rated their proficiency in English as below

average or poor. Sixty-two (62) subjects indicated a preference for speaking only English and only two (2) had a preference for speaking only Spanish. A majority (154) of the Mexican American subjects classified themselves as Bilingual and only 10 Mexican American subjects spoke only English. The correlation between the subjects' ratings of language proficiency in English and Spanish was non-significant (-.045). The correlation of overall CA measures i n

English and Spanish was significant at .364 (p.001).

DISCUSSION

The Mexican American college subjects in this study demonstrated an overall mean CA of 68.11 on the PRCA-24 when speaking English and 71.77 when speaking Spanish with standard deviations of 15.73 and 15.84, respectively. When compared with the normative mean PRCA score, the mean overall CA of the Mexican Americans was higher in both English and Spanish. The Mexican American CA measures in this study are different from those reported by researchers examining other Hispanic groups. In the studies by Allen and Andriate and Fayer, McCrosky and Richmond (1984) of CA associated with Hispanics (Puerto Rican university students) they found much lower levels of CA in Spanish and higher CA levels in English. Since Spanish is the Puerto Rican students dominant and native language, one would expect that the CA level in Spanish would be lower than the CA level in English. Research has repeatedly shown that bilingual, non-native students in the United States experience less CA in their native language than in English, and the native language was the dominant language for those subjects. For the Mexican American subjects in this study, although not necessarily the native language, English was the dominant language and the relative CA levels were consistent

with those from previously studied bilingual populations. It also should be noted that the CA levels for the Mexican American subjects were not as extreme as had been found with the Puerto Rican samples. The Puerto Rican sample showed less CA in the native language and more CA in the second language than did the Mexican American sample. A comparison of the Mexican American sample with the Latin American sample examined by Allen, O'Mara and Andriate (1984) shows similar patterns. However, the Latin American women's CA scores were significantly lower across all contexts than the Mexican American women. This study appears to support previous studies' findings that the level of communication apprehension is a function of the individual's native or dominant language. Bilinguals experience less CA in their native or dominant language than in their second language and this also occurs across communication contexts. Additionally, the CA scores increase as we move from the more informal, personal contexts to the more formal, less personal contexts.

Previous research had indicated that approximately 20 percent of the United States mainland population experiences high levels of CA (McCrosky and Richmond, 1982). The Mexican American women showed high CA frequencies substantially above the overall CA norm in both English and Spanish and an extremely high percentage in the public communication context. The Mexican American males were in the high CA range on overall CA only in Spanish. Moreover, all Mexican Americans showed a relatively low percentage of subjects with high CA in dyad, group and meeting situations in both English and Spanish.

In general, the data in this study is consistent with other crosscultural studies that showed Hispanics experiencing significantly more CA in meeting and public contexts than Europeans or Middle Easterners. Mexican Americans, unlike the other Hispanic groups previously studied, also showed significantly more CA in the interpersonal and dyad contexts than Middle Easterners or

Europeans.

Although CA values differ significantly across cultures in a variety of contexts, the communication norms of a specific culture will dictate whether the CA level is a problem. If an individual were to have a CA level exceeding the norm, it might hinder the individual's ability to interact with others of the same culture. For example, if a Mexican American experiences high CA in dyadic classroom situations, it might create a barrier to normal classroom interaction and the individual's failure to behave as expected might be perceived negatively by other communicators, including teachers and school administrators.

In their examination of Hispanics (Puerto Rican), Fayer, McCrosky and Richmond (1984) found a stronger positive relationship between proficiency in a second language and reduced CA in that language than between proficiency and CA in the native language. In an earlier study (1983), they concluded that proficiency in an individual's native language was not "meaningfully related to CA in that language. . ." (p. 7). This study found a significant positive correlation between CA and proficiency in both English and Spanish. An examination of subject preferences indicates that the Mexican American in this sample also preferred to speak in English, rather than Spanish.

While it has been suggested that CA is an affective response and, thus, may be unrelated to the performance skills (proficiency) of an individual, it also is possible that one factor underlying an individual's proficiency evaluation is their perception of their oral performance in specific contexts and, this perception may be shaped in part by the CA level of the student. Since behavior change can lead to affective change under certain circumstances, it may be possible in those cases to reduce CA by improving the student's performance skills and, thus, modifying the individual's perception

of his/her performance skills.

This study, as have previous studies of bilingual subjects, found significant positive correlations between one's CA in the two languages. Previous research suggested that CA is a trait which can be generalized across both languages for bilinguals. CA in a second language is best predicted by CA in a dominant or native language. If we assume that CA in a second language is related to CA in the dominant language, the findings may suggest that reducing CA in the dominant language may reduce CA in the second language.

It has been suggested that as the CA level in the dominant or native language increases, students will experience greater difficulty in learning a second language. Furthermore, individuals with high CA levels in certain learning situations may avoid those contexts. Thus, if CA is manifest in the learning situation required for increasing the students' second linguistic competence, they will experience difficulty learning the second language. While the underlying assumptions for this conclusion are supported by this study, neither this study nor any of those reported here actually tested or established any relationship between CA and language learning.

Previous research has not indicated any consistent CA patterns between males and females. McCrosky and Richmond (1980) found no meaningful differences between males and females on CA studies in the United States. Allen, Andriate and Cusick (1982) detected differences between males and females in meeting and public contexts, as well as on overall CA measures. Allen, O'Mara and Judd (1985) reported Hispanic (Latin American) women as less apprehensive than the Hispanic (Latin American) men. Fayer, McCrosky and Richmond (1984) examining Hispanic college students in Puerto Rico concluded that CA was not a function of gender. However, they did note that Hispanic males reported higher overall CA and higher CA measures in each context, except group, than

females. The CA measures among Mexican American males and females in this study were significantly different than those of Anglos and Hispanics examined in previous studies. Mexican American females consistently had higher CA scores than Mexican American males overall and across all communication contexts when speaking either English or Spanish. Furthermore, the CA levels of Anglos in this study were consistent with previous United States studies, showing no significant differences between men and women. Any gender differences may be the result of cultural bias relative to sex roles.

The Mexican Americans showed a pattern of increasing CA scores across communicative contexts, moving from dyad to group to meeting to public context. This pattern occurred for both men and women. Although this CA pattern had not been reported in previous research, it appears in the data reported by Fayer, McCrosky and Richmond (1984) on United States Hispanic pharmacy students. In addition, the CA of Latin American subjects in the Allen, O'Mara and Judd (1985) study exhibited this pattern when subjects were speaking English. Such a pattern would conform to general teacher observations and student comments that more CA is experienced in more formal situations involving greater numbers of participants such as a classroom or when speaking before an audience and less CA in more personal communication situations such as a dyadic and small group encounters.

The Mexican American high school students in this study demonstrated an overall mean CA of 34.13 on the PRCA 10 when speaking English and 35.66 when speaking Spanish with standard deviations of 6.65 and 6.87 respectively. When compared with the normative mean PRCA 10 score, the mean overall CA of the Mexican Americans was higher in both English and Spanish.

The Mexican American high school males and females showed high CA

frequencies significantly above the overall CA norm in English and Spanish. The Anglos indicated a normal range of high CAs in English, but an exceedingly high percent of CAs in Spanish, as one might normally expect. The communication apprehension levels of the Mexican American high school students in this study were exceedingly high and consistent with the high levels of CA found among other studies using Hispanic subjects, adults and college students.

This study found a significant positive correlation between the high school students' CA in a language and their perceived proficiency in that language, and examination of subject preferences also indicates that the students preferred to speak in English, rather than Spanish. The high school students showed a significant positive correlations between the CA in the two languages.

The CA measures among males and female Mexican American high school students were not significantly different. Furthermore, the CA levels of Anglos in this study were consistent with previous United States studies, showing no significant differences by gender. The first study of college students found significant differences. The college population of Mexican Americans may not correspond to the high school population. A normal selection process, that is, less than 45% of all Mexican Americans graduate from high school and less than 50% of graduates attend college, occurs which eliminates a significant percentage of the high school population from the college population pool. The results in the earlier study may reflect a restricted student population and not the Mexican American population as a whole.

The normal high school classroom requires students to communicate orally, frequently in a question and answer or dialogue mode. We would expect that students who are not proficient orally would not receive as much reinforcement

as students who are proficient orally. Students with high CA in the classroom context would likely restrict their oral communication. Since silence is rewarded by certain teachers and demanded in certain learning activities, the high CA would perceive silence as rewarding and the behavior would be reinforced. Rather than coping with the problem, students would avoid confronting their fear of communicating in the situation.

Some students may lack the skills necessary to be highly proficient in the classroom, while others may possess the appropriate behaviors but be unable to perform adequately due to high CA. This research project dealt with the identification of the latter. Based on our results, one could conclude that a significant number of Mexican American students in high school may be unable to perform adequately due to their excessively high levels of CA. Furthermore, such avoidance in the learning environment could involve a complex interaction with other factors. For instance, a lack of proficiency or understanding of the course content by the student, e.g., solving quadratic equations in algebra, could interact with an aversion to ask questions created by the high CA and the student would be unwilling to or unable to acquire the clarification or skills needed for learning the course concept. The failure to acquire clarification might ultimately be reflected in the student's inability to respond correctly on an examination. And, finally, improper examination responses would lead to lower achievement measures and a lower course grade.

TABLE 1

MEAN CA IN ENGLISH AND SPANISH

	ENGLISH			SPANISH		
CONTEXT	M	F	M/F	M	F	M/F
Dyad	14.836	15.780	15.371	16.142	16.949	16.811
Group	15.224	16.209	15.779	16.507	17.268	17.114
Meeting	16.410	17.996	17.296	17.582	18.602	18.231
Public	18.388	20.358	19.664	19.007	20.173	19.618
Overall	64.858	70.343	68.110	69.239	72.992	71.774
Overall s.d.	15.011	15.598	15.727	16.878	16.371	15.840

TABLE 2

HIGH CA BY SEX/CONTEXT/LANGUAGE

	LANGUAGE/SEX			
	ENGLISH		SPANISH	
CONTEXT	M	F	M	F
Dyad	3.0	9.4	9.7	11.4
Group	4.5	8.7	9.0	13.4
Meeting	7.5	13.0	14.2	18.1
Public	15.7	30.3	19.4	28.0
Overall	16.4	28.0	23.1	33.1

TABLE 3

LEVEL OF COMMUNICATION APPREHENSION BY SEX

CONTEXT	SPOKEN LANGUAGE	FEMALE MEAN	MALE MEAN	S.D.	F RATIO	(p)
Dyad	English	15.7795	14.8358	4.4251	4.021	.0456*
	Spanish	16.9488	16.1418	4.7847	2.505	.1143
Group	English	16.0287	15.2239	4.6523	3.961	.0473*
	Spanish	17.2677	16.5075	4.7162	2.287	.1313
Meeting	English	17.9961	16.4104	4.660	10.403	.0014*
	Spanish	18.6024	17.5821	4.7584	4.065	.0455*
Public	English	20.3583	18.3841	4.8557	14.963	.0001*
	Spanish	20.1732	19.0075	4.7104	5.435	.0203*
Overall	English	70.3425	64.8582	15.5985	11.128	.0009*
	Spanish	72.9921	69.2388	16.6224	4.513	.0343*

* Significant differences between male and female measures

TABLE 4

CORRELATIONS OF LANGUAGE PROFICIENCY AND CA

	PROFICIENCY	
CA SCORE	ENGLISH	SPANISH
Dyad	.2968*	.3606*
Group	.2442	.3845*
Meeting	.3006*	.3199*
Public	.2645*	.2720*
Overall	.3293*	.3813*

* Significant at the .001 level

TABLE 5

CORRELATIONS BETWEEN CA IN SPANISH AND CA IN ENGLISH

ACROSS CONTEXTS

	CA ENGLISH				CA SPANISH			
	Dyad	Group	Meeting	Public	Dyad	Group	Meeting	Public
CA ENGLISH	.8226	.8403	.8849	.8094	.3808	.3659	.4458	.4669
CA SPANISH	.3699	.3689	.4403	.4068	.8765	.8846	.9247	.8215

* All correlations are significant at the .001 level

TABLE 6

CA IN ENGLISH AND SPANISH

SEX	LANGUAGE					
	SPANISH			ENGLISH		
	Mean	mdn.	s.d.	Mean	mdn.	s.d.
FEMALE	35.64	36.15	7.15	34.16	43.04	6.35
MALE	35.68	35.71	6.35	34.10	34.36	6.59

TABLE 7

HIGH CA BY SEX AND LANGUAGE

	ENGLISH		SPANISH	
	MALE	FEMALE	MALE	FEMALE
MEXICAN AMERICAN	49.1	45.6	59.5	59.6
ANGLO	22.2	28.8	100.0	92.3

REFERENCES

Allen, J. C. (1984). Gender, Communication, Competence, Apprehension and the Basic Skills Course. Paper presented to the Seventh Annual Communication, Language and Gender Conference, Miami University, Oxford, Ohio.

Allen, J. L. and Andriate, G. S. (1984). Communication Apprehension In Bi-Lingual, Non-Native U.S. Residents. Communication. 13, 39-47.

Allen, J. L., Andriate, G. S. and Cusick, R. D. (May, 1982). A Comparison of Communication Apprehension In Basic Studies and Non-Basic Studies. Paper presented at the Eastern Communication Association.

Allen, J. L., O'Mara, J. and Andriate, G. S. (December, 1984). Communicating in a Second Language: Importance, Competency, and Apprehension. Paper presented to the speech Communication Association of Puerto Rico.

Allen, J. L., O'Mara, J. and Andriate, G. S. (December, 1984). Second Language Experience, and Communication Apprehension In Functional Contexts. Paper presented to the Speech Communication Association of Puerto Rico.

Bruneau, T., Cambra, R. and Klopf, D. (1980). Communication Apprehension: Its Incidence in Guam and Elsewhere. Communication, 9, 46-52.

Bruskin Associates. "What are Americans Afraid Of?" The Bruskin Report 1973, no. 73.

Burgoon, J. D. and Hale, J. L. (1983) A Research Note On the Dimensions Of Communication Reticence. Communication Quarterly, 31, 238-248.

Buss, A. H., Self-Consciousness And Social Anxiety. San Francisco: W. H. Freeman, 1980.

Cambra, R. and Klopf, D. (19[illegible]9). Further Investigations of Communication Apprehension In Hawaii. Communication, 8,44-51.

Carroll, J. (1964). Words, Meaning, and Concepts. Harvard Educational Review, 34, 178-202.

Crowell, L., Katcher, A. and Miyamoto, S. F. (1955). Self Concept of Communication Skill and Performance in Small Group Discussion. Speech Monographs 22, 20-27.

Cuellar, I., Harris, L. and Jasso, R. (1980). An Acculturation Scale For Mexican Americans Normal and Clinical Populations. Hispanic Journal of Behavioral Science, 2, 199-211.

Daly, J.A. and Friedrich, G. (1981). The Development of Communication Apprehension: A Retrospective Analysis of Contributory Correlates. Communication Quarterly, 29, 243-255.

Daly, J. A. & Miller, M.D. (1975). The Empirical Development of An Instrument To Measure Writing Apprehension. Research in the Teaching of English, 9, 242-249.

Duran, R.P. (1983). Hispanics' Education and Background. New York: College Entrance Board.

Erickson, F. and Shultz, J. (1982). The Counselor as Gatekeeper: Social Interaction in Interviews. New York: Academic Press.

Fayer, J., McCrosky, J.C. and Richmond, V.P. (May, 1984). Communication Apprehension in Puerto Rico and the United States I: Initial Comparisons. Paper presented to the International Communication Association, San Francisco.

Hamacheck, D. E. (1971). Encounters With The Self. New York: Holt, Rinehart & Winston.

Hansford, B. C. and Hattie, J. A. (1979). Communication Apprehsnsion: An Assessment of Australian and United States Data. Unpublished paper. University of New England, Australia.

Hayes, D. P. & Meltzer, L. (1972). Interpersonal Judgments Based on Talkativeness, I: Fact or Artifact? Sociometry, 33, 538-561.

Hayes, D. P. & Meltzer, L. (1979). Interpersonal Judgments Based on Talkativeness, II. Unpublished manuscript, Cornell University.

Hurt, H. T. and Preiss, R. (1978). Silence Isn't Necessarily Golden: Communication Apprehension, Desired Social Choice, and Academic Success Among Middle-School Students. Human Communication Research. 4,315-328.

Hurt, H. T., Scott, M. D., McCrosky, J. C. (1978). Communication In The Classroom. Reading, Mass: Addison-Wesley.

Jain, H. C., Kanungo, R. N. and Goldhaber, G. M. (1980). Attitudes Toward A Communiction system: A Comparison of Anglophone and Francophone Hospital Employees. Human Communication Research, 6, 178-184.

Juarez, N. F. (1984). Researcher Debunks Myths Propagated By Self-appointed `Spanish-market Gurus'. Marketing News, 78. (no. page citation)

Kelly, L. (1982). A Rose By Any Other Name Is Still A Rose: A Comparative Analysis of Reticence, Communication Apprehension, Unwillingness to Communicate and Shyness. Human Communication Research, 8, 99-113.

Klopf, D. W. (1978). A Method of Reducing Apprehension In The Classroom. Speech Education. 6, 64-73.

Klopf, D. W. and Cambra, R. E. (1979). Communication Apprehension Among College Students in America, Australia, Japan and Korea. The Journal of Psychology. 102,27-31.

Klopf, D. W. and Cambra, R. E. (1980). Apprehension About Speaking Among College Students in the People's Republic of China. Psychological Reports, 46, 1194.

Krashen, S. (1981). Second Language Acquisition and Second Lanaguage Learning. Oxford: Pergammon.

Laosa, L. (1975). Bilingualism in the United States' Hispanic Groups: Contextual Use of Lanaguage By Children and Adults in Families. Journal of Educational Psychology. 67, 617-627.

Laosa, L. (1977). Inequality In The Classroom: Observational Research On Teacher-Student Interactions. Aztlan International Journal of Chicano Studies Research. 8

La Red/The Net. Newsletter of the National Chicano Research Network, Chicana Survey Report No. 5: Group Naming and Cultural Inclinations. Institute for Social Research, University of Michigan at Ann Arbor, May 1981, 3-4.

Leary, M. R. (1983). Understanding Social Anxiety: Social, Personality, and Clinical Perspectives. Beverly Hills, CA: Sage Publications.

Lederman, L. C. (1983). High Communication Apprehensives Talk About Communication Apprehension and Its Effects on Their Behavior. Communication Quarterly, 31, 233-237.

Macias, R. (1979). Mexicano/Chicano Sociolinguistic Behavior and Lanaguage Policy in the United States. Unpublished doctorial dissertation, Georgetown University, Washington, D.C.

McCrosky, J. C. (1970). Measures of Communication-Bound Anxiety. Speech Monographs, 37, 269-277.

McCrosky, J. C. (1976). The Problem of Communication Apprehension in the Classroom. Communication, 4, 117-119.

McCrosky, J. C. (1976). The Effects of Communication Apprehension on Nonverbal Behavior. Communication Quarterly, 24, 39-44.

McCrosky, J. C. (1976). Communication Apprehension in University and Community College Environments. Unpublished Monograph, West Virginia University.

McCrosky, J. C. (1976). Normative Levels of Communicative Apprehension Among Elementary and Secondary School Students. Unpublished Monograph, West Virginia University.

McCrosky, J. C. (1977). Oral Communication Apprehension: A Summary of Recent Theory and Research. Human Communication Research, 4, 78-96.

McCrosky, J. C. (1977a). Classroom Consequences of Communication Apprehension. Communication Education, 26, 27-33.

McCrosky, J. C. (1978). Validity of the PRCA As An Index Of Oral Communication Apprehension. Communication Monographs, 45, 192-203.

McCrosky, J. C. (1980). On Communication Competence and Communication Apprehension: A Response to Page. Communication Education, 29, 239-244.

McCrosky, J. C. (April, 1981). Oral Communication Apprehension: A Reconceptualization And A New Look At The Measurements. Paper presented at the Central States Speech Association, Chicago.

McCrosky, J. C. (1982). Introduction to Rhetorical Communication. Englewood Cliffs: Prentice-Hall.

McCrosky, J. C. (1982). Oral Communication Apprehension: A Reconceptualization. In M. Burgoon (Ed.), **Communication Yearbook** 6 (pp. 136-170). Beverly Hills, CA: Sage Publications.

McCrosky, J. C. and Andersen, J. F. (1976). The Relationship Between Communication Apprehension and Academic Achievement Among College Students. **Human Communication Research**, 3, 73-81.

McCrosky, J. C. and Beatty, M. J. (1984). Communication Apprehension As A Function of Communication State Anxiety Experiences. **Communication Monographs** (in press).

McCrosky, J. C. and Daley, J. A. (1976). Teachers' Expectations of the Communication Apprehensive Child in the Elementary School. **Human Communication Research**, 3, 67-72.

McCrosky, J. C., Daley, J.A., Richmond, V.P. and Falcione, R. L. (1977). Studies of the Relationship Between Communication Apprehsension and Self-Esteem. **Human Communication Research**, 3, 269-277.

McCrosky, J. C., Fayer, J. M. and Richmond, V. P. (December, 1983). Don't Speak To Me In English: Communication Apprehension In Puerto Rico. Paper presented to the Speech Communication Association of Puerto Rico.

McCrosky, J. C. and McVetta, R. W. (1977). The Relationship Between Communication Apprehension and Clasroom Seating Preferences. Unpublished Monograph, West Virginia University.

McCrosky, J. C. and Richmond, V.P. (1976). The Effects of Communication Apprehension On the Perception of Peers. **Western Speech Communication Journal**, 40, 11-21.

McCrosky, J. C. and Richmond, V. P. (1980). **The Quiet Ones: Communication Apprehension and Shyness**. Dubque, Iowa: Gorsach Scarisbrick.

McCrosky, J. C. and Richmond, V. P. (1981). The Etiology and Effects of Communication Apprehension: Cross-Cultural Implications. Paper presented to the Speech Communication Association of Puerto Rico.

McCrosky, J. C. and Shealan, M.E. (1975). Seating Position and Participation: An Alternative Theoretical Explanation. Paper presented at the International Communication Association, Chicago.

Nielsen, Faud Fernandez, R. M. (1982). Hispanic Students in American High Schools: Background Characteristics and Achievement. Washington, D.C.: National Center for Educational Statistics.

Passel, J. S. and Warren, R. (1983). Population Division, U.S. Bureau of the Census from Mexico Counted in the United States.

Payne, S. K. and Richmond, V. P. (1984). Communication Avoidance: A Bibliography of Research and Writing in Communication Apprehension, Reticence and Shyness. In J. A. Daley and J. C. McCrosky (Eds.), **Communication Avoidance: Communication Apprehsension, Reticence and Shyness**. Beverly Hills, CA: Sage Publications.

Phillips, G. M. and Butt, B. (1966). Reticence Re-visted. **Pennsylvania Speech Annual**, 23, 40-57.

Powers, W. and Smythe, M. J. (1980). Communication Apprehension and Achievement in a Performance-Oriented Basic Communication course. **Human Communication Research**, 6, 146-152.

Ramirez, A. (1981). Lanaguage Attitudes and The Speech of Spanish-English Bilingual Pupils. In R. P. Duran (Ed.) **Latino Language and Communicative Behavior** (pp. 217-232). Norwood, N.J.: Ablex.

Richmond, V. P. and Andriate, G. S. (1984). Communication Apprehension: Cross-cultural Perspective. Paper presented at the Eastern Communication Association Conference.

Scott, M.D., Yates, M. and Wheeless, L. R. (1975). An Exploratory Investigation of the Effects of Communication Apprehension in Alternative Systems of Instruction. Paper Presented at the International Communication Association convention, Chicago.

U. S. Commission on Civil Rights (1973). Teachers and Students, Differences in Teacher Interaction With Mexican American and Anglo Students. Report V: Mexican American Education Study. A report of the U. S. Commission on Civil Rights. Washington, D.C.

U. S. Department of Health, Education and Welfare, National Center for Educational Statistics, 1978. The Educational Disadvantage of Language Minority Persons in the United States, Spring 1976, No. 78 B-4. Washington, D. C.

U. S. Department of Health, Education and Welfare, National Center for Educational Statistics, 1978. Place of Birth and Language Characteristics of Persons of Hispanic Origin in the United States, Spring 1976, No. 78 B-6. Washington, D. C.

Wheeler, L. R. (1971). Communication Apprehension in the Elementary School. **Speech Teacher**, 20, 297-299.

Zimbardo, P. E. (1977). **Syness: What It Is and What To Do About It**. Reading, MA: Addison-Wesley.